UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,512	03/16/2007	Thomas Eugene Cloete	DMKISCH.004APC	8457

20995 7590 09/08/2008

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER	
STAFIRA, MICHAEL PATRICK	

ART UNIT	PAPER NUMBER
2886	

NOTIFICATION DATE	DELIVERY MODE
09/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No.	Applicant(s)	
	10/581,512	CLOETE ET AL.	
	Examiner	Art Unit	
	/Michael P. Stafira/	2886	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 June 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/1/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

1. Claim 1 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 6, 7. See MPEP § 608.01(n). Accordingly, the claims 6, 7 are not been further treated on the merits.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the transmitting of light through the transparent member or the reflecting off the surface of the member must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Wetegrove et al. ('917).

Claim 1

Wetegrove et al. ('917) discloses a member (Fig. 1, Ref. 10) providing said surface for continuously moving into and out of a body of liquid (Fig. 10, Ref. L); and a sensor (Fig. 6, Ref. 20, 22) for continuously measuring biofilm formation and for being located outside the body of (See Fig. 10) liquid and for measuring biofilm formation on a measuring zone of the surface when disposed outside the body of liquid (Col. 5-6, lines 53-11).

Claim 2

Wetegrove et al. ('917) discloses the member is a disk (Fig. 10, Ref. 10) disposed inside a

housing (Fig. 10, Ref. 36) and rotatable about an axis (Fig. 10, Ref. 32), and wherein the housing (Fig. 10, Ref. 36) is provided with a liquid inlet (Fig. 10, Ref. 34) and a liquid outlet (Fig. 10, Ref. 40) and a passage for the liquid extending through the housing from the inlet to the outlet (See Fig. 10), with at least a portion of the disk (Fig. 10, Ref. 10) being disposed inside the passage (Fig. 10, Ref. L), and wherein the liquid fills the housing only partly (See Fig. 10), the arrangement being such that as the member (Fig. 10, Ref. 10) continuously rotates in the housing (Fig. 10, Ref. 36), at any given time a portion thereof is submerged in the liquid (Fig. 10, Ref. L) and another portion, providing the said measuring zone, is disposed outside the liquid (See Fig. 10).

Claim 4

Wetegrove et al. ('917) discloses the sensor (Fig. 20, 22) is disposed inside the housing (Fig. 10, Ref. 36) above the level of the liquid (Fig. 10, Ref. L), in use.

Claim 6

Wetegrove et al. ('917) discloses the disk (Fig. 10, Ref. 10) is transparent and the transmitter (Fig. 6, Ref. 20) and the receiver (Fig. 6, Ref. 22) are located on opposite sides of the disk (See Fig. 6), the arrangement being such that the transmitter (Fig. 6, Ref. 20) transmits a light bean onto said measuring zone (Fig. 6, Ref. TG) and the receiver (Fig. 6, Ref. 22) receives the light passing through the surface (See Fig. 6).

Claim 7

Wetegrove et al. ('917) discloses a plurality of bodies (Fig. 1A) of different material are mounted on the disk in the measuring zone for observing biofilm formation on different materials (See Fig. 1A).

Claim 8

Wetegrove et al. ('917) discloses providing a body of liquid (Fig. 10, Ref. L); providing a member (Fig. 10, Ref. 10) including a surface having a measuring zone (Fig. 6, Ref., TG) and for being disposed outside the body liquid (See Fig. 6); continuously moving the surface (Fig. 10, Ref. 10) into and out of the body of liquid (See Fig. 10); providing a sensor (Fig. 6, Ref. 20, 22) for measuring biofilm formation outside the body of liquid (See Fig. 6); and continuously measuring biofilm formation by measuring light being received from the said measuring zone (Col. 5-6, lines 53-11).

Claim 9

Wetegrove et al. ('917) discloses the step of continuously moving (Fig. 10, Ref. 32) the surface (Fig. 10, Ref. 10) into and out of the body of liquid (Fig. 10, Ref. L) includes the step of rotating the member about a central axis (Fig. 10, Ref. 11), the arrangement being such that a portion thereof is submerged in the liquid and another portion is outside the liquid (See Fig. 10).

Claim 10

Wetegrove et al. ('917) discloses the further step of observing biofilm formation on different types of materials (See Fig. 1A).

Claim 11

Wetegrove et al. ('917) discloses the step of observing biofilm formation on different types of materials (See Fig. 1A) includes the steps of providing bodies of different types of materials, mounting the bodies on the member in the measuring zone so that they are rotated (Fig. 10, Ref. 32) with the member and observing said biofilm accumulation thereon (Col. 5-6, lines 53-11).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wetegrove et al. ('917) in view of Toyama ('055).

Claim 3

Wetegrove et al. ('917) substantially teaches the claimed invention except that it does not show a plurality of vanes mounted around the disk for aiding in the rotation of the disk with a flow between the inlet and outlet. Toyama ('055) shows that it is known to provide an a plurality of vanes (Fig. 1, Ref. 12) mounted around a disk (Fig. 1, Ref. 14) and within an inlet and outlet (Fig. 1, Ref. A) for an apparatus that uses vanes to help rotate the disk. It would have been obvious to combine the device of Wetegrove et al. ('917) with the vanes of Toyama ('055) for the purpose of providing a rotation of the disk with little of no mechanical or electrical help, therefore reducing the amount of energy needed.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wetegrove et al.

Claim 5

Wetegrove et al. ('917) discloses the claimed invention except for the transmitter is reflected from the surface to a receiver. It would have been obvious to one having ordinary skill

in the art at the time the invention was made to combine Wetegrove et al. ('917) with the reflecting off the surface since it was well known in the art that reflecting of the surface allows the optics to be positioned on one side of the target, therefore making the apparatus more compact and easier to maintain.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Michael P. Stafira/ whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael P. Stafira/
Primary Examiner
Art Unit 2886

August 29, 2008